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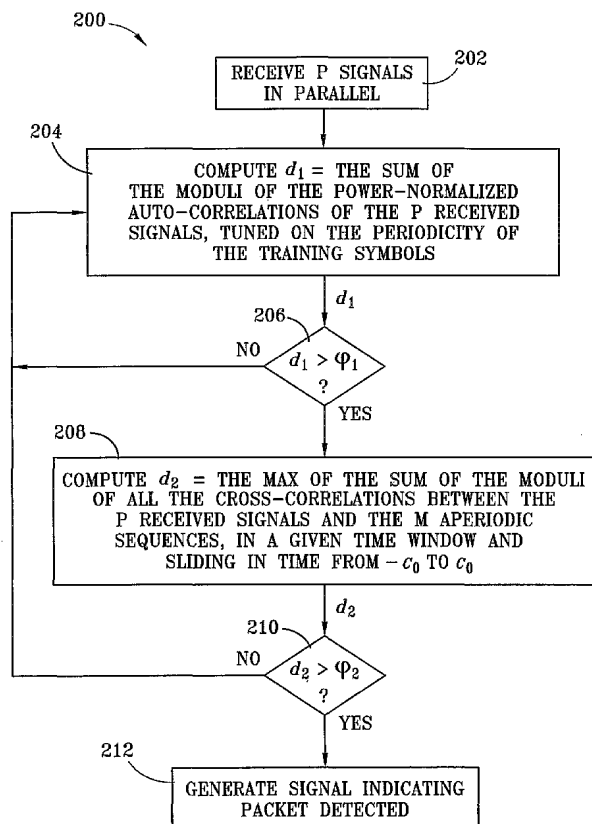
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[Continued on next page]

(54) Title: APPARATUS, AND ASSOCIATED METHOD, FOR DETECTING PACKETS



(57) Abstract: In a robust system and method for detecting packets in SISO and MIMO broadband multicarrier transmission, a packet detector computes continuously the sum of the moduli of the power-normalized auto-correlations of a sequence of received signals (204), tuned on the periodicity of the training symbols. When the power-normalized auto-correlation exceeds a first predetermined threshold (206), then the maximum value of the sum of the moduli of all the cross-correlations between the received signals and the M aperiodic sequences is computed in a given time window (208), sliding in time from  $-c_0$  to  $c_0$ . A packet is identified as received (212) when the maximum value of the sum of the moduli of the cross-correlations exceeds a second predetermined threshold (210).

WO 2005/069190 A1



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